WE CLAIM AS OUR INVENTION

14) A silicon cuvette comprising:
a silicon substrate having a chamber for containing a microsample during analysis; and
a chamber window formed of silicon nitride positioned over the chamber.

15) The device of claim 14, wherein the silicon nitride has a thickness of from about 0.01 of a micrometer to about 5 micrometers.

16) Method of constructing a window in a silicon cuvette, comprising the steps of:
providing a silicon substrate having a top surface and a bottom surface;
etching a depression in the top surface of the silicon substrate defining a microsample chamber;
depositing a silicon nitride film on the top surface of the silicon substrate and in the chamber; and
etching a depression in the bottom surface of the silicon substrate in registration with the chamber in the top surface for exposing the silicon nitride film within the chamber to form the chamber window.

17) The method of Claim 16, wherein the silicon substrate is a silicon wafer.

18) The method of Claim 16, wherein the silicon nitride film has a thickness of from about 0.01 of a micrometer to about 5 micrometers.

19) A microsampling device for obtaining a microsample of bodily fluid from a subject, comprising:

a substrate having a chamber with a sampling side and a viewing side for containing and viewing a microsample; and

a chamber window formed of silicon nitride covering the chamber for closing the viewing side.

20) The device of Claim 19, wherein the substrate is silicon.

21) The device of Claim 20, wherein the silicon substrate has a thickness of about 500 micrometers.

22) The device of Claim 19, wherein the silicon nitride window has a thickness of from about 0.01 of a micrometer to about 5 micrometers.

23) The device of Claim 19, wherein the silicon nitride forming the window is optical quality.

24) The device of Claim 19, further comprising an antireflective coating over the silicon nitride window.

25) The device of Claim 24, wherein the antireflective coating is magnesium fluoride.

26) The device of Claim 19, wherein the chamber has a volume of less than 1 microliter.

27) The device of Claim 19, further comprising a closure member over the chamber for closing the sampling side.

28) The device of Claim 27, wherein the closure member engages the substrate around the periphery of the chamber forming an interface therebetween.

29) The device of Claim 28, further comprising:

a needle formed at a needle end of the device for obtaining the sample;

an intake bore extending from the needle end to the chamber along the interface between the closure member and the substrate for transporting the sample into the chamber.

30) The device of Claim 29, further comprising an exhaust vent extending from the chamber away from the needle end along the interface between the closure member and the substrate for venting the chamber as the sample is transported into the chamber.

31) The device of Claim 30, wherein the bore and the vent are formed in the substrate.

32) Method of constructing a chamber window in a microsample chamber, comprising the steps of:

providing a silicon substrate having a sampling side and a viewing side;

etching a depression in the sampling side of the silicon substrate defining a microsample chamber;

depositing a silicon nitride film on the sampling side of the silicon substrate and in the microsample chamber; and

etching a depression in the viewing side of the silicon substrate in registration with the microsample chamber in the sampling side for exposing the silicon nitride film within the microsample chamber to form the chamber window.

33) The method of Claim 32, wherein the silicon substrate has a thickness of about 500 micrometers.

34) The method of Claim 32, wherein the silicon nitride film has a thickness of from about 0.01 of a micrometer to about 5 micrometers.